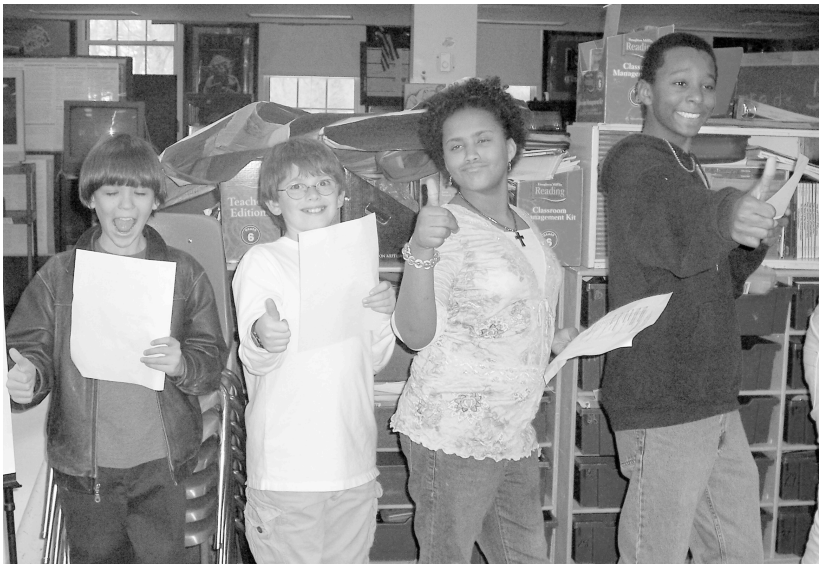
Curriculum-Based Readers Theatre Scripts
Math



Rosalind M. Flynn

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The author would appreciate notification where errors occur so that they may be corrected in subsequent printings and/or editions.

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"Acting! I like acting, physical movement, learning through doing—not reading boring books! This kind of readers theatre lets us have fun, get out of our seats, and learn at the same time!"

Fifth Grader
Springfield, Missouri

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ABOUT THE AUTHOR

Rosalind Flynn has been developing Curriculum-Based Readers Theatre (CBRT) scripts with students and teachers throughout the United States since 1995. Over the years, she has learned a lot about what makes a CBRT script an effective tool for increasing retention of curriculum information, improving reading fluency, engaging students in a learning experience, and encouraging a theatrical delivery of the words on the page.

Rosalind focuses her work on the principles of arts integration. She has collaborated with students and teachers to create readers theatre scripts that integrate curriculum content and learning strategies with the skills and creativity of the art form of theatre. The CBRT scripts may be about topics that students would label "dull," but Rosalind gets students thinking like playwrights. They are writing to involve a large cast (the entire class) and to produce a script that entertains as well as informs. The results, which she shares in this and three other subject-specific books, are more than collections of scripts about facts that students need to know. They are dramatic teaching tools that involve students in reading, rehearsing, and performing. They provide students with the opportunity to practice speaking skills and stage presence, and to become kinesthetically and creatively involved in the theatrical delivery of a script. This script students practice and perform simultaneously reinforces the content information that they are responsible for learning.

In her book *Dramatizing the Content with Curriculum-Based Readers Theatre, Grades 6-12* (International Reading Association, 2007) and in her professional development workshops, Rosalind details the process of creating original scripts that address targeted curriculum objectives and information. Because she has led so many students and teachers in this work, she has hundreds of excellent CBRT scripts in her computer files. She took the best of those to create these script collections to share with educators who work with students of all ages.

Rosalind earned her PhD in Curriculum and Instruction at the University of Maryland. She is the head of the Master of Arts in Theatre Education at The Catholic University of America in Washington, DC. She is also a national teaching artist for the Education Department of The John F. Kennedy Center for the Performing Arts. Her e-mail is RMCFlynn@aol.com.

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INTRODUCTION

What is Curriculum-Based Readers Theatre?
Curriculum-Based Readers Theatre (CBRT) incorporates the basics of traditional readers theatre—actors reading aloud from a script, performing without costumes, props, or stage movement (blocking). But instead of scripts that are based on stories or literature, CBRT scripts use school content areas as their topics—Science, Math, Social Studies, and English Language Arts topics, for example.

Each script in this book began as a list of content information—facts, ideas, and processes that students are supposed to learn. The nuts and bolts of how to develop CBRT scripts from lists of content information is the focus of *Dramatizing the Content With Curriculum-Based Readers Theatre, Grades 6-12,* published in 2007 by The International Reading Association. This book of Math CBRT scripts and three other subject-specific script collections (Science, Social Studies, and English Language Arts) serve as ready-made classroom tools and examples of scripts intended both to inform and entertain.

How are the scripts used in the classroom?
Speakers of the lines in the scripts are indicated simply by numerals on the left hand side of each column of dialogue. Numerals identify solo speakers, pairs, small groups, and whole group unison speakers—"All." Occasionally, to involve half the group in speaking, a script will read "Odds," meaning that readers with odd numbers read that line, and likewise for lines marked "Evens." Lines marked "Left," "Middle," or "Right" provide ways to have speakers with stage positions on the left, in the middle, or on the right of the group speak together.

Photocopy the scripts back-to-back (for ease in handling), distribute them to students, and assign speaking roles. It is helpful if students' lines—both the solo lines and those spoken with others— are highlighted in yellow. Then lead students through reading the scripts aloud. The CBRT scripts are intentionally short in length for practical use in busy classrooms. Students who read, re-read, repeat, and rehearse a CBRT script in preparation for performance tend to remember the information in the text.

[gesture]
When you come to the stage direction [gesture], work with the students to come up with a gesture that will help communicate something about the words they are speaking. Because students will be reading from the script as they perform it, direct them to hold their scripts in their left hands and create gestures that they can perform primarily with their right hands and arms.

[sound effect]
Do the same when you come to the stage direction [sound effect]. Explore sound effects (vocal sounds, finger snaps, thigh slaps, etc.) that will help communicate something about the particular words being spoken. Determine the best sound effect and use it in that portion of the script.

[X]
Some CBRT scripts contain a stage direction that is simply an X in brackets [X]. That stage direction occurs in chants to indicate a rest or a beat within the chant. Have students slap their thighs or snap their fingers on the beat when they see [X].

May the CBRT scripts be altered in any ways?
Absolutely!
Please feel free to alter or edit the scripts in any or all of the following ways:

Adjust the number of solo speakers—Add speakers if you have more students than the script accommodates, or revise the script so that there are fewer speakers.

Adjust the curriculum terminology—Change the script wording so that it accurately reflects your curriculum's terminology.

Change unfamiliar wording or expressions—Perhaps there's a phrase that's gone out of date or perhaps your students come up with an expression they'd prefer to use. Make edits during the initial readings and rehearsals and use your altered version of the script.

How are CBRT Rehearsals conducted?

Focus on one column of the script at a time.
Read through that column, make decisions about gestures and sound effects, practice the way that lines spoken by "All" will be delivered, encourage students to use vocal expression and characterization, and then read through that same column again (and possibly again) before moving to the next column. Approach each column in the same way and then rehearse the entire script.

Rehearse the script until the students are reading fluently.
Conduct the initial rehearsals with the students seated at their desks or standing behind them. The repeated reading of the same text increases students' reading fluency; the repetition of the script's content information contributes to their retention of the information. The gestures add a kinesthetic element to the reading activity. Students' projection and expression grow stronger in repeated rehearsals.

Assign "stage positions."
Once the students are familiar and fluent with the script's lines, gestures, and sound effects, assign them a position for performance. This position may simply be where they will stand in the semi-circle of their classmates when they enter another classroom to perform. It may be the step or riser they stand on for a performance in the school all-purpose room. You may choose to have half of your students seated in chairs while the other half stands behind them. Once students have their stage positions, rehearse the script with students in position.

Encourage the students to act with energy and expression!
During rehearsals, emphasize the importance of delivering the script as an energetic and entertaining piece of theatre. Coach students to speak loudly and with expression. Assure them that their audiences will appreciate a lively, well-prepared performance.

How important is it that the students perform the CBRT script?
The goal of performance is overwhelmingly motivating for most students. Working towards a performance is what makes students willing to read, re-read, and rehearse a CBRT script many times. For many students, it's one of the few opportunities they will ever have to present a rehearsed piece for an audience. For many students, it's as thrilling as a Broadway opening and they experience the same exciting jitters! The performance of the CBRT script transforms a reading experience into a theatrical experience.

Coin Value and Identification

Curriculum-Based Readers Theatre Script

1 And now a message from our sponsor:

All **The U.S. Mint!**

2 Mmm, fresh breath!

All **Not that kind of mint! [gesture]**

3 The U.S. Mint makes coins.

All **The U.S. Mint makes coins. [gesture] [sound effect]**

4 I have a penny! 1 - 2 - 3 - 4! [gesture]

All **A penny is worth one cent. 1 - 2 - 3 - 4! [gesture]**

4 And the president on the penny coin is…

All **Abraham Lincoln. [gesture]**

5 I have a nickel! 5 - 10 - 15 - 20. [gesture]

All **A nickel is worth five cents. 5 - 10 - 15 - 20! [gesture]**

5 And the president on the nickel is…

All **Thomas Jefferson. [gesture]**

6 I have a dime! 10 - 20 - 30 – 40!

All **A dime is worth ten cents. 10 - 20 - 30 – 40! [gesture]**

6 And the president on the dime is…

All **Dwight D. Eisenhower. [gesture]**

7 I have a quarter! 25 - 50 - 75 - 100. [gesture]

All **A quarter is worth twenty-five cents. 25 - 50 - 75 - a dollar! [gesture]**

7 And the president on the quarter is…

All **George Washington. [gesture]**

8 Copper coins, penny coins.

9 Silver coins, many coins.

All **Quarter, dime, nickel, penny—**

U.S. Mint produces many! [gesture] [sound effect]

10 Call now!

1 For a free tour…

2 of the U.S. Mint.

3 Don't miss out on this valuable opportunity.

All **[sound effect]**

Telling Time

Curriculum-Based Readers Theatre Script

1 Welcome to Telling Time Boot Camp!

All **Yes, Sir! [gesture]**

1 I am Officer O'clock, your Tick, Tock Sergeant.

All **Yes, Sir! [gesture]**

1 These are my cadets:
Hour hand (#2)
Minute hand (#3) and
Second hand. (#4) [gesture]

2 For the next day, or 24 hours, you will learn about clocks and time!

1 First, you need to count the hours.

3 Sir, how do we count the hours, sir?

All **1 o'clock, 2 o'clock, 3 o'clock—tock, 4 o'clock, 5 o'clock, 6 o'clock—tock, 7 o'clock, 8 o'clock, 9 o'clock—tock, 10 o'clock, 11 o'clock, 12 o'clock—tock. [gesture]**

2 Right! We tick, we tock around the clock—two times everyday. [gesture]

All **We tick, we tock around the clock—two times everyday. [gesture]**

1 Next, you need to count the minutes.

4 Sir, how do we count the minutes? Sir.

1 Left, Left, Left, Right, Left.

All **5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60! [gesture]**

2 Right, We tick, we tock around the clock! 60 minutes in every hour.

All **We tick, we tock around the clock! 60 minutes in every hour.**

1 Then, you need to count the seconds.

2 Sir, how do we count the seconds, sir?

All **1, 2, march a few, 59, 60. [gesture]**

2 We are the tick, we are the tock, marching all around the clock.

All **We are the tick, we are the tock, marching all around the clock. [gesture]**

3 Sixty ticks for every minute.

All **Sixty ticks for every minute.**

4 Sixty tocks for every hour.

All **Sixty tocks for every hour.**

2 Twenty-four hours in every day.

All **Twenty-four hours in every day.**

1 Dismissed! For one hour!

All **Yes, sir! [gesture]**

Fractions

Curriculum-Based Readers Theatre Script

1 Who wants some candy?

All **Me! [gesture]**

1 But I only have one whole Mr. Goodbar!

All **Oh, man! [gesture]**

2 I have to buy my own, then.

3 Oh, snap!

4 I know how you can share your whole candy bar!

All **Great! How? [gesture]**

4 You need to know about fractions.

All **Fractions? What is a fraction? [gesture]**

5 A fraction is a part of a whole.

6 A hole in the ground? Did the fraction fall in?

All **[sound effect]**

7 No! A whole is one entire thing—like a cake…

All **or a candy bar! [gesture]**

8 See, your whole bar of candy can be divided into pieces,

9 sections,

10 or parts.

4 Those equal parts are fractions!

1 So, if I divide my whole Mr. Goodbar into four equal pieces, and I give one piece away to _____ (#5), I still have three pieces left.

5 Right. I have a fraction of your whole candy bar. One of your four pieces.

All **Or one fourth! (¼) [gesture]**

1 And my three pieces are also a fraction?

2 Three out of four.

All **Three fourths! (¾)**

1 Then, if I give another piece away to _____(#6), I have two pieces left.

6 My one piece is the fraction, one fourth. (¼)

1 And I still have two out of four pieces left.

7 Two fourths or…

All **One half! (½) [gesture]**

1 So if I give a third piece away to _____(#8), we each have…

1, 5, 6, 8 One fourth of a Mr. Goodbar!

All **[sound effect]**

1 I like this Fraction Action!

8 Who knows how you write a fraction?

All **Me! I do! I do! [gesture]**

9 A fraction has two numbers written one on top of the other…

All **with a line in between. [gesture]**

10 The top number has to be less than the bottom number. It's called the…

All **Numerator! [gesture]**

1 The bottom number has to be greater than the top number. It's called the

All **Denominator! [gesture]**

3 So for the fraction three fourths (¾), 3 is the…

All **Numerator! [gesture]**

4 And 4 is the…

All **Denominator! [gesture]**

4 Got it?

All **Got it! [gesture]**

7 Okay, I got it about the fractions, but I didn't get any candy!

All **Me neither! [gesture]**

1, 5, 6, 8 Mmmmmm, even a fraction of a candy bar is good! [gesture]

All **[sound effect] Hmph.**

Fractions and Decimals
Curriculum-Based Readers Theatre Script

1 Next on…

All **The Math Channel! [sound effect]**

2 Welcome to…

All **Math Mania! [sound effect] [gesture]**

3 Starring…

All **Decimals and Fractions!**

4 Zero and Eight Tenths (0.8),

All **The decimal [gesture]**

5 Eight Tenths (8/10),

All **The fraction! [gesture]**

6 Are they the same?

7 Are they different?

8 Are they equal?

All **Hmmm? [gesture]**

9 Let's meet tonight's maniacs! [gesture] [sound effect]

10 Decimal—a number that shows part of a whole…

All **using a decimal point. [gesture] [sound effect]**

11 Fraction—a number that names a part of a whole…

All **using a fraction bar. [gesture] [sound effect]**

12 So, is zero and eight tenths (0.8),

All **the decimal, [gesture]**

12 the same as eight tenths (8/10)

All **the fraction. [gesture]**

13 These two quantities look different in number form…

All **but… they are equal in value! [gesture]**

14 So, like, dude, if we cut a pizza into 10 equal tubular pieces…

15 how many scrumptious pieces would be all mine if I got to have zero and eight tenths (0.8) of the pizza?

All **Eight totally tubular equalicious pieces! Yum! Yum! [gesture]**

16 Preposterous! One time, I digested eight tenths (8/10)—

All **the fraction—[gesture]**

16 of a pizza, resulting in, by my calculation, the consumption of 8 perfectly proportionate pieces!

All **Well, duh, genius!**

17 That's because they're equal!

All **Duh! [gesture]**

18 So, like, are you saying that sixth tenths (6/10)—

All **the fraction— [gesture]**

18 is totally the same as zero and six tenths (0.6)—

All **the decimal? [gesture]**

19 Totally! [gesture]

20 So, ya'll, what if I had two hundredths (0.02)—

All **the decimal—[gesture]**

20 of my mama's pie? What might mama's pie look like then?

21 Shucks, that's barely a bite!

28: I'm hungry! When can I eat?

29 Yeah, me too!

22 If a pie got cut into 100 pieces, you would only get two teeny, tiny pieces—

All **the same as two-hundredths (2/100), the fraction. [gesture]**

23 Thanks for joining us today on…

All **The Math Channel! [sound effect]**

24 We hope you now know that…

All **every decimal has an equal fraction!**

25 So…fractions and decimals…

26 look different in number form,

All **But… they are the equal in value! [gesture]**

27 Join us next week when we talk about elapsed time, here on…

All **Math Mania! [sound effect] [gesture] Bye! [sound effect]**

Multiplication

Curriculum-Based Readers Theatre Script

1, 2 What is multiplication?

All **Multiplication?**

It's a fast way, [sound effect] [gesture]

A simple way, [sound effect] [gesture]

An efficient way [gesture]

To add equal groups…

3 over,

4 and over,

5 and over,

6 and over,

7 and over again!

1,2 We still don't get it!

8 Okay, let's try it.

9 Give me a hand!

All **[Applaud]**

9 Ha ha ha. I mean, show me a hand.

1 [Hold out hand.]

6 How many fingers are on one hand?

1 Five.

All **Great! That's one group of five. [gesture]**

7 Hey, we just did multiplication!

8 Yeah, that was one times five!

2 Time? [gesture]

5 No, not the time of day.

All **"Times"—That's another way to say "groups of."**

1 One—[gesture]—times five equals one group of five.

All **One—[gesture]—times five equals one group of five.**

5 Okay, give me another hand.

All **[Applaud again.]**

5 Oh, very funny. How about 4 hands?

1 - 4 [Each hold out one hand.]

6 How can we figure out how many fingers are on all four hands?

All **Multiplication!**

It's a fast way, [sound effect] [gesture]

A simple way, [sound effect] [gesture]

An efficient way [gesture]

To add equal groups

3 over,

4 and over,

5 and over,

6 and over,

7 and over again!

6 Four hands!

1 That's 4 groups of 5!

All **4 times 5.**

1 Five [first hand out]

2 plus five [second hand out]

3 plus five [third hand out]

4 plus five [fourth hand out]

1 5 [first hand out]

2 10 [second hand out]

3 15 [third hand out]

4 20 [fourth hand out]

All	**4 times 5 equals 20!**	3	over,
	Multiplication!	4	and over,
	It's a fast way, [sound effect] [gesture]	5	and over,
	A simple way, [sound effect] [gesture]	6	and over,
	An efficient way [gesture]	7	and over again!
	To add equal groups…	1, 2	Multiplication! We get it! [gesture]

Geometry Terms

Curriculum-Based Readers Theatre Script

1 Welcome to everybody's favorite quiz show—

All **What's My Line?**
[gesture] [sound effect]

2 Please welcome tonight's contestants: former NFL lineman, Pro Tractor!

3 I'll tackle any line!

4 And, world acclaimed actress, Rue Lure!

5 Thank you! Thank you!

6 Tonight's topic is geometry terms.

All **Geometry—the branch of Math that deals with angles, surfaces, solids, and lines.**

5 Oh! I've memorized many lines in my career! "Romeo, oh Romeo, wherefore…"

All **Not THAT kind of line!**
[sound effect]

1 No, tonight Rue Lure and Pro Tractor will try to figure out what parts tonight's guests play in….

All **Geometry!**

2 Let's get started! First guest, tell us something about yourself.

7 I'm here, I'm there, I'm everywhere! On a plane, on a line, on a polygon…

3 So, uh, what's your point???

7 Exactly! I am a point!

All **A point is a location anywhere on any plane. [gesture] [sound effect]**

4 Well done, Mr. Pro Tractor! You've earned one point for identifying a point!

6 Next guest, what are your characteristics?

8 Well, I am a completely flat, two-dimensional surface…

5 What time does this show end? I have to catch a plane.

1 Plane! Rue Lure—that is correct!

All **In geometry, a plane is any flat or level surface. [gesture]**

2 Our contestants are tied. Let's meet our next guest.

9 You won't find any curves on my long, straight, thin bod. I am like the Energizer Bunny. I just keep going and going…this way and that way. I just never stop. I…

3 Okay, okay, you're rambling…

9 To Infinity and beyond!!!

3 Whoa, you must be a line!

5 I know, right? A line just keeps going on and on and on. No beginning point… no end point…

All **A geometric line is a set of points on a plane that extend in opposite directions with no end. [gesture]**

4 We'll give both contestants a point for their responses. Score is still tied. Next guest, please.

10 Well, I have a point at my beginning and I just sort of keep going in only one direction.

11 Where do you end up?

10 Somewhere…out there…!

12 Do you ever plan on stopping?

10 No, I'll just keep going in this same direction infinitely.

5 Sounds like this guy I used to date named Ray…

1 Correct! Our guest is a ray!

All **Rays are lines that have a starting point, but go on infinitely in one direction. [gesture]**

5 Woo hoo! That puts me in the lead!

3 Hmphf. Bring on the next guest.

13 Yo! Enough of this infinity stuff! Ray, you need two end points! Like me!

3 Two end points?

13 Yep. Start—finish. That's it!

5 You're being a little short, don't you think?

13 Well, my straight, thin bod can be short or long.

5 Huh?

13 That's right. I have a definite beginning point and a definite ending point.

3 Bro! You must be a line segment!

All **A line segment is a part of a line that is bounded by two end points. [gesture]**

3 Score one for the Pro!

1 Well, folks, that's all we have time for tonight.

2 Join us tomorrow to see if we can break the tie between Pro Tractor and Rue Lure…

6 when our topic is Algebra!

All **Algebra—the branch of mathematics that deals with the rules of operations and relations and….**

1 Thanks everyone! Join us again for everybody's favorite quiz show—

All **What's My Line?**
[gesture] [sound effect]

Angles

Curriculum-Based Readers Theatre Script

1 Attention, everybody!

2 Welcome to this year's selection of

All **The Angle of the World!**
[sound effect]

3 This year's candidates are…

4 The acute angle—

All **Acute—an angle that measures less than 90°. [gesture]**

5 He's SO cute!

6 The next candidate is the right angle—

All **Right—an angle that measures exactly 90°. [gesture]**

7 She's so right for the job!

8 And last, but not least, is the obtuse angle!

All **Obtuse—an angle that measures more than 90°, but less than 180°. [gesture]**

9 Because 180° is a straight angle and between 180° and 360° is a reflex angle.

All **Wow! [gesture]**

10 How will we choose the winner?

1 We will measure each angle using a protractor!

2 A tractor? How can a big farm vehicle measure an angle?

All **Not a tractor – a protractor! [gesture]**
[sound effect]

1,2 What's that?

All **A protractor is a half-circle tool used to measure angle degrees.**

3 And now we'll hear from the acute angle!

4 Vote for me because I measure wedges, ramps, and stair rails!

1 - 4 ACUTE! ACUTE! ACUTE! [gesture]

6 Next, we'll welcome the right angle.

7 Vote for me because I'm used in the right way. I measure…

8 buildings,

9 books and papers,

10 squares,

All **and the U.S. flag! [gesture]**

5 - 7 RIGHT! RIGHT! RIGHT! [gesture]

8 Last, we'll hear from the obtuse angle.

9 Vote for me. I measure Lazy Boy recliners, a regular hexagon, and a cabinet door opening wide.

8 - 10 OBTUSE! OBTUSE! OBTUSE! [gesture]

4 Vote for me! I'm a cute little angle! [gesture]

7 Vote for me! I'm always right! [gesture]

9 Vote for me! We'll have an obtuse amount of fun! [gesture]

1 We have measured all the angles, seeking the largest one of all.

2 Before we announce the winner of…

All **The Angle of the World, [gesture]**
[sound effect]

3 We would like to thank the participating angles—

All **Acute! [gesture] Right! [gesture]**
Obtuse! [gesture]—

5 for all the ways they have measured up!

All **[sound effect]**

6 And now the winner for this year is…

All **Drum Roll Please! [sound effect]**

8 The winner of the Angle of the World, with 128°, is…

8-10 OBTUSE!

All **OBTUSE! [gesture] [sound effect]**

10 Behind him is right angle with exactly 90°!

All **That's RIGHT! That's RIGHT! That's RIGHT! [gesture]**

1 And, in last place is acute angle with 45°!

All **ACUTE—How cute! [gesture]**

2 And there you have it!

All **Obtuse—The 2011 Angle of the World! [sound effect]**

3 Let's hear it for Obtuse!

All **Hip-hip hooray! Hip-hip hooray! Hip-hip hooray! [gesture]**

Solid Shapes

Curriculum-Based Readers Theatre Script

1 Good morning, travelers!

2 Thank you for booking a tour with…

All **Three-D Travel Agency! [sound effect] [gesture]**

3 Where our motto is…

All **All shapes are solid! [gesture]**

4 No solid shape—

All **No service! [gesture]**

5 On today's tour, please notice that…

All **All solid shapes have space inside them.**

6 All?

All **All!**

7 Hey! I thought this was the flat shapes tour!

8 No! We're here to see 3-D shapes!

9 What are 3-D Shapes?

All **[chant]**
Spheres and Cylinders
Cones and Pyramids
[X] Rectangular Prisms
And don't forget the Cubes! [X]

10 Here on our right, you will see the pool of spheres.

11 Do you mean those balls?

All **Yes! Spheres are solids with rounded surfaces. [gesture]**

12 Like that floating rubber duckie?

All **No! A sphere is a globe or a ball! [gesture]**

13 On your left, you will see the forest of cylinders.

14 Look at all those soda cans, Mommy!

15 Someone's been littering!

16 No kids, those are cylinders.

All **Cylinders are two circle bases connected by a curved surface. [gesture] [sound effect]**

17 Free ice cream cones!

18 I want an ice cream cone!

All **Cone is another solid shape!**

19 What is a cone?

All **A cone has one circle base which meets at a point called an apex. [gesture] [sound effect]**

20 Ape X! I'm afraid of gorillas!

21 Travelers—Calm down!

All **Apex means point. [gesture] [sound effect]**

20 Oh. Phew!

22 Are we lost? Because it looks like we are in Egypt.

1 Understandable. That's because you're seeing pyramids.

All **Pyramids are solid shapes that have a base…**

2 that could be a triangle

3 or could be a square.

4 But make a mental note—

All **All the faces of a pyramid are triangles! [gesture]**

5 Look—a cereal box!

6 A book!

7 A door!

8 As you can see, we're at the Rectangular Prisms Exhibit.

All **Rectangular prisms—solid shapes. All sides are rectangles!**

6 All?

All **All!**

9 Look at that rectangular prism! It's shrunken!

10 It hasn't shrunken! It's a cube!

11 A cube?

All **A cube is a solid shape with faces that are squares. [gesture]**

12 Like dice!

All **Or an ice cube! [sound effect][gesture]**

13 Ice cubes! I need them for my geometry headache! [gesture]

14 That concludes the Three-D Travel Agency tour of solid shapes—

All **[chant]**
Spheres and Cylinders
Cones and Pyramids
[X] Rectangular Prisms
And don't forget the Cubes! [X]

16 Any questions?

18 Yeah! Where's my ice cream cone?

Triangles

Curriculum-Based Readers Theatre Script

1 Good Morning Buyers!

2 Welcome to…

All **Triangleville! [gesture] [sound effect]**

3 Yes, if you want a triangle home—

All **Get it here! [gesture]**

4 We have three models of triangles here in…

All **Triangleville! [gesture] [sound effect]**

5 A cute little acute triangle!

All **Acute! [gesture]**

6 An upright right triangle! [gesture]

All **Right! [gesture]**

7 And the biggest, roomiest triangle you can get – the obtuse triangle!

All **Obtuse! [gesture]**

8 All of our beautiful, low- priced triangles have pointy corners.

All **Corners are where the sides of a triangle meet! [gesture]**

9 Tell me more about the sides feature.

All **Sides are the walls of the triangle [gesture]**

10 Also known as…

All **Line segments. [gesture]**

11 Line segments, you say?

12 Please tell us the difference between lines and line segments.

All **Lines go on forever! [gesture] [sound effect] Line segments stop at both ends. [gestures]**

13 Today only – we have a special on triangles that are congruent.

14 Before I buy a congruent triangle, what does congruent mean?

All **Congruent means the same size and the same shape.**

15 Can we get similar triangles, too?

16 Let us familiarize you with our similar triangle models

All **Similar means that the shapes are the same and the sizes are different. [gesture]**

17 Smaller triangles and bigger triangles.

18 Howdy y'all! I'm the kind of buyer that wants a house that is the same on both sides.

19 The same on both sides!

All **Ah! You want a symmetrical triangle house!**

20 Symmetry means that if you cut it down the middle,

All **[gesture]**

21 …you will have sides that are the same!

22 What?!

All **THE SAME! [gesture]**

22 Any questions?

24 Do you have any square houses?

25 No this is…

All **Triangleville! [gesture] [sound effect]**

3 Yes, if you want a triangle home—

All **Get it here! [gesture]**

Equilateral, Isosceles, and Scalene Triangles

Curriculum-Based Readers Theatre Script

1 Good Evening Buyers!

2 Welcome back to…

All **Triangleville! [gesture] [sound effect]**

3 Yes, if you want a triangle home—

All **Get it here! [gesture]**

4 Today only! We are running a special on three new models here in…

All **Triangleville! [gesture] [sound effect]**

5 First up—part of our Acute Triangle Design homes, but very even and orderly—the Equilateral!

All **Equilateral?**

6 Yes, for the conventional precise buyer, the Equilateral model has 3 equal sides and 3 equal 60° angles. [gesture]

All **Equilateral: 3 equal sides and 3 equal 60° angles. [gesture]**

7 What about that one over there? Is that one also part of your Acute Triangle Designs?

8 Yes it is! We call this our Isosceles model. It has 2 equal sides and 2 equal angles.

All **Isosceles: 2 equal sides and 2 equal angles. [gesture]**

9 So, the 3rd side of the Isosceles is always smaller than each of the other 2 sides?

10 Correct.

11 And the 3rd angle of the Isosceles is different from its other 2 angles?

10 Correct—but all three angles will still always add up to…

All **180 degrees!**

12 Hold on—Is that an Isosceles model over in your Right Triangle section?

1 Very observant! Yes—we have just one model that can be classified in two sections.

2 Our Right Isosceles Triangle model has a right angle—

All **90° [gesture]—**

2 and also two equal angles, each measuring…

All **45°. [gesture]**

13 Thanks for your time, but I was looking for something a little more edgy, a little less, well—boring!

3 Wait! Don't leave! You simply must visit our Obtuse Triangle section.

4 Just take a look at this model—the Scalene Triangle!

13 Ohhhh, it appears to have no equal sides and no equal angles!

All **Scalene: no equal sides and no equal angles. [gesture]**

13 I love its non-conformist look.

5 So, how about it, folks? Will you take advantage of this one day only special on three terrific triangle models?

All **The Equilateral. [gesture]**
The Isosceles. [gesture]
The Scalene. [gesture]

6 Act now and we'll throw in a free protractor to measure the angles of your new home!

7 I'll take the Equilateral.

9, 11 We'll go with the Isosceles.

12 The Right Isosceles is the one for me.

13 Sign me up for the Scalene.

8 Right this way folks.

10 Let's seal the deal.

1 And thank you for choosing…

All **Triangleville! [gesture] [sound effect]**

3 Yes, if you want a triangle home—

All **Get it here! [gesture]**

Polygons

Curriculum-Based Readers Theatre Script

1 Ladies and Gentlemen!

2 Boys and Girls!

3 Let's give a warm welcome to….

All **The Polygon Patrol! [sound effect]**

4 named for—

All **The Polygon… [gesture]**

5 meaning a two-dimensional figure.

6 Like to figure out a question?

All **[sound effect]**

7 No! A geometric shape!

8 A geometric shape on a plane!

9 An airplane?

All **[sound effect] No! [gesture] In geometry, a plane is a flat surface! [gesture]**

9 Oh.

All **Polygons are two-dimensional geometric figures on planes, meaning flat surfaces. [gesture]**

8 And all the sides of polygons are straight!

All **Straight! [gesture]**

9 All the sides are closed!

All **Closed! [gesture]**

10 First, let's meet a three-sided polygon!

All **A triangle! [gesture]**

11 And now—some four-sided polygons!

12 Introducing….

13 A square!

14 A rectangle!

15 A rhombus!

16 A trapezoid!

17 And—a parallelogram!

18 A para-what-o-gram?

All **A parallelogram!**
Four-sided polygons—square, rectangle, rhombus, trapezoid, and parallelogram!

19 Four sides! Let's hear it for four-sided polygons!

All **[sound effect]**

20 Hey—is there a five-sided polygon?

All **You betcha! [gesture]**

20 What's its name?

All **A pentagon!**

1 Like the big government building in Washington, DC?

2 That's right! It's called The Pentagon because it has five…

3 straight,

4 closed,

5 sides.

6 You mean The Pentagon is a polygon?

All **Right! [gesture]**

7 Wow! Polygons must be pretty important, then!

All **Well, we think so!**
Because we are
The Polygon Patrol!

8 Polygons! Two-dimensional geometric figures…

All **With straight sides! [gesture]**
With closed sides! [gesture]
On planes! Not airplanes! [gesture]
Flat surfaces! [gesture]
Polygons!

Polygons

Curriculum-Based Readers Theatre Script

1 Hello. What kind of house are you looking for?

2,3,4 We need a quadrilateral.

5,6,7 We are looking for a hexagon.

8,9,10 We are interested in your octagon model.

11 Well, you've come to the right place!

1 Polygon Palace!

All **Polygon Palace! Polygon Palace! [sound effect—like a TV commercial song or chant]**
If you want a home with a vertex, a vertex,
You're going to live in great shape, great shape! [gesture]

2 Remind me again—What's a vertex?

3 A vertex is the point where two sides of a polygon meet, remember?

4 Like a sharp corner, remember?

2 Oh, yeah!

14 We've got quadrilaterals!

All **Quadrilaterals! [gesture]**

15 They have four sides!

16 And four vertices!

5 Remind me again—What are vertices?

All **Vertices means more than one vertex—the plural of vertex, remember?**

7 Like more than one sharp corner, remember?

5 Oh, yeah!

All **Quadrilaterals—four sides and four vertices! [gesture]**

2,3,4 That's a good deal for us!

1 We've also got hexagons!

All **Hexagons! [gesture]**

11 They have six sides!

12 And six vertices!

All **Hexagons—six sides and six vertices!**

5,6,7 We're buying! [gesture]

13 We've got octagons!

All **Octagons! [gesture]**

14 They have eight sides!

15 And eight vertices!

All **Octagons—eight sides and eight vertices! [gesture]**

16 And so very many possibilities for diagonals!

8 Remind me again—What are diagonals?

9 Diagonals are line segments, remember?

All **Diagonals connect two of the vertices of the polygon, remember?**

8 Oh, yeah!

1 So, which model home can Polygon Palace sell you today?

2,3,4 The quadrilateral!

5,6,7 The hexagon!

8,9,10 The octagon!

15 Three sales in one day!

16 Business is good for Polygon Palace!

All **Polygon Palace! Polygon Palace! [gesture]**
If you want a home with a vertex, a vertex,
You're going to live in great shape, great shape! [gesture]

12 Call 1-333-POLYGON!

All **Polygon Palace! Polygon Palace!** [gesture]

Quadrilaterals

Curriculum-Based Readers Theatre Script

All **(sung) *Are you smarter than a __ grader?* Get a pencil and a piece of paper!**

1 Welcome to *Are you Smarter than a __ grader?* Tonight's guest is Peter Polygon the 4th!

All **Peter! Peter! [gesture]**

2 Let's meet our classmates!

All **(Hum theme song during introductions.)**

3 Rudy Rectangle! [gesture]

4 Sally Square! [gesture]

5 Ron Rhombus! [gesture]

6 Pollyanna Parallelogram! [gesture]

7 Tracy Trapezoid! [gesture]

1 And last but not least…

8 Quentin Quadrilateral! [gesture]

All **(Stop humming.)**

1 Quentin Quadrilateral, tell us a little about yourself.

8 Well, my friends tell me I'm a closed figure. I have 4 straight sides and 4 angles.

All **That's right! 4 sides and 4 angles! 4 sides and 4 angles! Quadrilateral!**

2 Now let's meet Tracy Trapezoid.

7 I'm a lot like Quadrilateral but I have one pair of parallel sides.

All **A trapezoid is a quadrilateral with 1 pair of parallel sides, 1 pair of parallel sides. [gesture]**

6 I'm next! I'm next! I'm Pollyanna Parallelogram. I have 2 pairs of parallel sides and my opposite angles are congruent.

All **A parallelogram has 2 pairs of parallel sides, 2 pairs of parallel sides. [gesture]**

3 Whatever Pollyanna, I'm better than you.

1 What makes you better, Rudy Rectangle?

3 I'm a special parallelogram with 4 right angles. As a rectangle, I'm a special parallelogram.

All **A rectangle is a parallelogram with 4 right angles, 4 right angles. [gesture]**

2 Ron Rhombus, you've been awfully quiet over there.

5 People often overlook me. They call me a kite or a diamond, or even worse—a slanted square.

All: **Oh, poor rhombus! The inhumanity! [sound effect]**

1 Ron Rhombus, tell us what makes you special.

5 I'm a parallelogram with 4 congruent sides and I don't have to have 90-degree angles.

4 But, but, but I'm Sally Square, the gifted quadrilateral. My sides and angles are all equal. I have four 90-degree angles. I'm perfect.

All **A rhombus is a parallelogram with 4 congruent sides and its opposite angles are equal. [gesture]**

1 And as for squares—

All **Squares are parallelograms with 4 congruent sides and 4 right angles, 4 congruent sides and 4 right angles.**

2 So Peter, what do you think? What category would you like to start with?

10 I have to think about this.

All **(sung softly)** ***Are you smarter than a __grader?*** **Get a pencil and a piece of paper!**

1 Ohhhh—looks like we're out of time today!

2 Join us tomorrow to see just how much Peter Polygon the 4th remembers about…

All **Quadrilaterals!**

1 Here on—

All **(sung)** ***Are you smarter than a __ grader?*** **Get a pencil and a piece of paper!**

Math Word Problems

Curriculum-Based Readers Theatre Script

1 Welcome to Unsolved Math Mystery Boot Camp! [gesture]

All **Yes Sir! [gesture]**

1 I am Inspector Clues, your Word Problem Sergeant. [gesture]

All **Yes, sir! [gesture]**

1 These are my cadets,

2 Addition,

3 Subtraction,

4 Multiplication,

5 and Division! [gesture]

2 This week you will earn how to solve Math Word Problems.

1 First, you need to read the problem. [gesture]

2 What comes first?

All **Read the word problem, sir! [gesture]**

1 Right.

3 Next, you look for the question. [gesture]

4 What is the question? [gesture]

All **It is the math mystery we're trying to solve, sir. [gesture]**

1 The math mystery we're trying to solve! Correct!

3 You also need to search for clue words! [gesture] [sound effect]

All **Search for clue words, sir! [gesture] [sound effect]**

2 For addition, we search for…

altogether,

sum,

in all,

or how many! [gesture]

All **For addition, we search for…**

altogether,

sum,

in all,

or how many, sir! [gesture]

3 For subtraction, we search for…

more than,

less than,

compare,

and difference. [gesture]

All **For subtraction, we search for…**

more than,

less than,

compare,

and difference. [gesture]

4 For multiplication, we search for…

times,

groups,

or total. [gesture]

All **For multiplication, we search for…**

times,

groups,

or total. [gesture]

5 For division, just remember the word "each!" [gesture]

All **For division, just remember the word "each!" [gesture]**

1 Now you're ready to solve the math mystery!

2 Reread the word problem. [gesture]

3 Use the clue words to decide what to do. [gesture]

4 Now solve the word problem!

All **We're ready to solve the word problem, sir! Here we go! [gesture] [sound effect]**

1 Halt! Does your answer make sense? Is it a logical answer?

All **Sir, yes sir! [gesture]**

5 Thank you Inspector Clues!

All **For helping us learn how to solve Math Word Problems, sir! [gesture]**

1 Dismissed! [gesture]

Greatest Common Factor

Curriculum-Based Readers Theatre Script

1 Are your fractions too cumbersome to calculate?

2 Are your numerators and denominators…

All **Out of Control? [gesture]**

3,4 Yes! Yes they are!

5 Then you need…

All **[sound effect] G.C.F.!**

3, 4 G.C.F.?

All **Greatest Common Factor! [sound effect]**

5 Greatest–

All **meaning "the larger value—the biggest!" [gesture]**

6 Common—

All **meaning "the same, similar."**

7 Factor—

All **meaning "a number multiplied by another number to get a product!**

8 Product—

All **meaning "the answer to a multiplication problem!" [sound effect]**

3 How can G.C.F. help us?

9 Let's take a look at those unwieldy fractions of yours.

3 Okay, well, I have the fraction 27/45.

4 Twenty-seven forty-fifths?

3 I know, right? I can't even begin to imagine what that looks like!

4 What should she do?

All **Simplify that fraction! [gesture]**

3, 4 Simplify?

11 First, find the factors of the numerator 27.

All **1, 3, 9, 27.**

12 Then, find the factors of the denominator 45.

All **1, 3, 5, 9, 15, 45.**

13 Which factors do both the numerator and the denominator have in common?

3 Um, 1, 3, and 9.

14 And which of those numbers is the greatest—1, 3, or 9?

3 Nine!

All **So, 9 is the Greatest Common Factor. [sound effect]**

3, 4 The G.C.F.!

All **Right! [gesture]**

4 Okay, so now what?

15 Well, when you divide the numerator and the denominator of a fraction by the same number—

16 in this case 9—

15 you get a simpler fraction that's equal to the fraction you began with.

3, 4 Ohhhhh.

All **Simplify that fraction! [gesture]**

4 A little help here?

All **Divide the numerator and the denominator by the G.C.F.—9.**

3 Here goes: 27 divided by 9 equals 3.

4 And 45 divided by 9 equals 5.

1 And your simpler fraction is—

3, 4 3/5: Three fifths!

3 Three out of five—That's much easier to imagine!

4 What about my fraction—37/74: Thirty-seven seventy-fourths?

All **Whoa. Hefty. [gesture]**

3 What should she do?

All **Simplify that fraction! [gesture]**

11 First, find the factors of the numerator 37.

All **1, 37.**

12 Then, find the factors of the denominator 74.

All **1, 2, 37, 74.**

13 Which factors do both the numerator and the denominator have in common?

4 1 and 37.

14 And which of those two numbers is greater—1 or 37?

4 Duh—37!

All **So, 37 is the Greatest Common Factor. [sound effect]**

3, 4 The G.C.F.!

4 So my simplified fraction is ½: one half!

All **Correct—all thanks to Greatest Common Factor! [sound effect]**

1 A.k.a. "Greatest Common Denominator."

3 Wow. Thanks everybody!

3, 4 G.C.F. is going to change our lives!

All **G.C.F.—Use it often and accurately—**

2 Whenever your numerators and denominators are…

All **Out of Control! [gesture]**

Integers

Curriculum-Based Readers Theatre Script

1 Welcome to the Integer Family Reunion!

2 Yes, we're the Integers!

All **Integers—Whole numbers that are not fractions…**

3 and have no fractional parts!

4 Both sides of the family are here today.

5 The negative integers:

All **-1, -2, -3, -4.**
All the whole numbers with a negative sign,
found on the left of the number line!

6 And the positive integers:

All **1 and 2 and 3 and 4—**
Counting numbers.
You know the score!

7 And don't forget that favorite Integer family member who is neither positive nor negative…

8 The central number on our number line:

All **Zero! [gesture]**

9 So, some numbers in our Integer family can be negative?

All **-1, -2, -3, -4, -5, and so forth!**

9 And some numbers in our Integer family can be positive?

All **1, 2, 3, 4, 5, and so forth!**

10 And don't forget zero—one hero of an Integer!

11 Uh-oh! Don't look now, but I think we have some party crashers!

12 I recognize that number from school—one third!

13 And I recognize that other number from my neighborhood—three and three quarters!

All **One third? Three and three quarters! They are <u>not</u> Integers! [sound effect]**

14 They're numbers, but they are not integers.

All **Integers—Whole numbers that are not fractions…**

3 and have no fractional parts!

15 They will feel so out of place here at our family reunion.

1 But we don't want them to think that integers are unfriendly.

2 Right—I mean, sometimes we hang out with them.

16 Hey! One Third here! And this is my cousin Three and Three Quarters!

17 Where's the fraction bar?

4 The fraction bar?

5 You must have the wrong address.

16 Isn't this the Fractions Family Reunion?

17 The invitation said "2 ½ Math Street at quarter past 4."

6 No! This is the Integer Family Reunion!

2 Yes, we're the Integers!

All **Integers—Whole numbers that are not fractions…**

3 and have no fractional parts!

7 Your reunion must be right next-door!

16 If you had half a brain, you would have looked at the number on this house!

17 I must have been half asleep! Bye Guys!

16, 17 Sorry! Have a great party!

All **We plan to have a whole lot of fun!**

4 With both sides of the family.

5 The negative integers:

All **-1, -2, -3, -4.**
All the whole numbers with a negative sign,
found on the left of the number line!

6 And the positive integers:

All **1 and 2 and 3 and 4**
Counting numbers.
You know the score!

7 And don't forget that favorite Integer family member who is neither positive nor negative…

8 The central number on our number line:

All **Zero! [gesture]**

9 The buffet line is open!

The Order of Operations

Curriculum-Based Readers Theatre Script

1 Once upon a time,

2 a young student…

3 was home alone…

4 working on a math problem.

5 $(4 \times 20) \div 8 + 65 - 2 \times 5^2$ equals 133? 225? 28.16? UH! Which answer is right?

1 The young student was frustrated.

2 And then she started hearing voices…

3 whispery voices!

All **Please Excuse My Dear Aunt Sally.**

5 Wha-What?

All **Please Excuse My Dear Aunt Sally.**

5 Please go away! I don't know any Aunt Sally and I am trying to do my math homework.

4 We're only trying to help you.

1 It's clear that you need to know…

All **The Order of Operations!**

5 No. I need to know how to get the right answer to this equation.

6 You need to know how to handle all those operations.

5 Operations?

All **Operations: things like add, subtract, multiply, divide, square.**

5 Oh, right.

7 Are you wondering what part should you calculate first?

8 Should you start at the left and go to the right?

9 Or go from right to left?

10 Warning: Calculate your operations in the wrong order, and you will get

All **The wrong answer! [sound effect]**

5 Aaauugh! Okay—help me and I'll excuse your aunt for whatever she did.

11 Long, long ago people created rules for doing calculations.

12 These rules are called:

All **The Order of Operations!**

5 So, was your old Aunt Sally one of those rules creators?

13 No—that sentence we spoke is just a way to remember the rules.

All **Please Excuse My Dear Aunt Sally.**

14 "P" as in "Please" stands for Parentheses.

All **Do the operations in Parentheses First. [gesture]**

5 Okay. (4 x 20). That equals 80.

15 "E" as in "Excuse" stands for Exponents.

All **Do operations with Exponents next.**

5 You mean powers and roots?

All **Yes.**

5 Okay. 5 squared equals 25.

16 "M" as in "My" and "D" as in "Dear" mean Multiply and Divide.

5 So my next step is to do all multiplication and division?

All **Correct. Work from left to right in the equation.**

5 Here goes: 80 ÷ 8 equals 10! 2 x 25 equals 50. What's next? Wait a minute—Aunt Sally! I'll bet that stands for "Addition" and "Subtraction!"

All **Right you are! [gesture] Again, work from left to right in the equation.**

5 10 + 65 - 50.
10 + 65 equals 75.
75 – 50 = 25.
25! That's the correct answer?

All **[gesture] [sound effect]**

5 And what's that sentence for remembering the Order of Operations again?

All **Please Excuse My Dear Aunt Sally.**

14 "P" as in "Please" stands for…

All **Parentheses.**

15 "E" as in "Excuse" stands for…

All **Exponents.**

16 "M" as in "My" and "D" as in "Dear" mean…

All **Multiply and Divide—**

5 working from left to right.

17 "A" as in "Aunt" and "S" as in "Sally" mean…

All **"Addition" and "Subtraction"—**

5 working from left to right.

All **Please Excuse My Dear Aunt Sally.**

5 Okay, well, um like—Thanks for the math help. But I think you better go now.

All **Please do well on your test! [gesture]**

Bases and Exponents

Curriculum-Based Readers Theatre Script

1 Two [gesture]

2 times Two [gesture]

All **equals Four.**

1 Two [gesture]

2 times two [gesture]

3 times two [gesture]

All **equals eight.**

1 Two [gesture]

2 times two [gesture]

3 times two [gesture]

4 times two [gesture]

All **equals sixteen.**

1 Two [gesture]

2 times two [gesture]

3 times two [gesture]

4 times two [gesture]

5 times two [gesture]

All **equals thirty-two.**

6 Hey, this takes way too long. Don't you know about bases and exponents?

3 What's a base?

2 The beginnings of soup!

4 Where you run after you hit the ball!

1 The low part of music!

6 No, in math, what is the base?

All **The base is the number which you keep multiplying. [gesture]**

1-5 Oh, like the two that we kept multiplying!

6 Correct. Now, what is an exponent?

5 The opposite of imponent?

All **[sound effect]**

5 No, really, what is an exponent?

All **In math, an exponent shows you the number of times you multiply the base by itself.**

7 An exponent is written as a small number to the right and above the base number.

1 Oh! So, two… [gesture]

2 times two [gesture]

7 can be written as the number two with a small two right and above it!

8 And you call it "Two to the second power" or…

All **"Two squared!" [sound effect]**

8 And it equals four. [gesture]

1 Two [gesture]

2 times two [gesture]

3 times two [gesture]

9 can be written as the number two with a small three right and above it!

10 And you call it "Two to the third power" or…

All **"Two cubed!" [sound effect]**

10 And it equals eight.

1 Two [gesture]

2 times two [gesture]

3 times two [gesture]

4 times two [gesture]

11 can be written as the number two with a small four right and above it.

12 And you call it…

All **"Two to the fourth power." [sound effect]**

12 And it equals sixteen.

6 Now you try it on your own.

1 Two [gesture]

2 times two [gesture]

3 times two [gesture]

4 times two [gesture]

5 times two [gesture]

1 can be written as the number two with a small five right and above it.

2 And you call it…

All **"Two to the fifth power." [sound effect]**

2 And it equals thirty-two.

All **[gesture] [sound effect]**

6 I think you got it.

All **Base—the number you keep multiplying by itself.**

6 How often?

All **As many times as the exponent tells you to! [gesture] [sound effect]**

6 Well done.

Range, Median, and Mode

Curriculum-Based Readers Theatre Script

[Note: Performers 1 - 7 wear headbands labeled with numerals 2, 3, 3, 4, 5, 5, 5.]

8 Excuse me, but could you please tell me why you are wearing headbands with numbers on them?

1 - 7 Because we are the Median Mode Rangers! [gesture] [sound effect]

8 Um. Okay.

9 So, what exactly do you Median Mode Rangers do for a living?

1 - 7 We live to help the world understand range, median, and mode.

10 You mean like in Math?

1 That is correct. Please allow us to demonstrate.

2 We'll start with range.

11 Range?

1 - 7 Range—the distance between two numbers!
Range—the distance from the greatest to the least! [gesture]

All Oh, so range means "distance." [gesture]

12 Median?

1 - 7 Median—the middle number in a list of numbers arranged in order!

1 - 3 Median—half the numbers in the list are less. [gesture]

5 - 7 Median—half the numbers in the list are greater! [gesture]

All Oh, so median means "middle." [gesture]

13 Mode?

1 - 7 Mode—the numbers that most often repeat!
Mode—the numbers that most often repeat!

All Oh, so mode means "the most popular of the numbers!" [gesture]

14 So—what's up with the numbers on your heads?

3 Because we Median Mode Rangers know that it's easier to understand range, median, and mode when we show you with numbers.

4 Roll call!

1 Two!

2 Three!

3 Three!

4 Four!

5 Five!

6 Five!

7 Five!

15 So let's start with range. What's your range?

[1 - 7 arrange themselves in random order as All chant the definition below.]

All Range—the distance between two numbers!
Range—the distance from the greatest to the least! [gesture]

7 In this list of numbers, I am the greatest! The number 5! [gesture]

1 And I am the least! The number 2! [gesture]

8 So, to find the range, we subtract. Correct?

1 - 7 Correct! 5 – 2 = 3.
3 is the range! [sound effect]

All **Range means "distance." [gesture]**
3 is the range! [sound effect]

10 Easy enough. Now how about your median?

[1 - 7 arrange themselves in a line from lowest to highest as All chant the definition below.]

All **Median—the middle number in a list of numbers arranged in order!**

Median—half the numbers in the list are less. [gesture]

Median—half the numbers in the list are greater! [gesture]

1 Who's in the middle?

4 I'm in the middle! [gesture]

7 Then you are the median!
4 is the median!

1 - 3 Half the numbers in this list are less than 4. [gesture]

5 - 7 Half the numbers in this list are greater than 4. [gesture]

All **Median means "middle." [gesture]**
4 is the median!

11 Show us the mode!

[1 - 4 gesture towards the performers wearing the number "5" as All chant the definition below.]

All **Mode—the numbers that most often repeat!**

Mode—the numbers that most often repeat!

1 - 4 It's clear to see that in our list, the numbers that most often repeat are…

5 - 7 Five! [gesture]

All **Mode means "the most popular of the numbers!" [gesture]**
5 is the mode!

5 – 7 Oh yeah. We're the mode! Uh huh!

12 Well, this has been very helpful. Thanks Median Mode Rangers!

13 I guess you'll have to get going now.

1 – 7 Not before we give you our Median Mode Rangers Quiz! [sound effect]

All **Uh oh.**

1 – 7 Define range!

All **Range—the distance between two numbers!**
Range—the distance from the greatest to the least!

1 – 7 Define median!

All **Median—the middle number in a list of numbers arranged in order!**

Median—half the numbers in the list are less. [gesture]

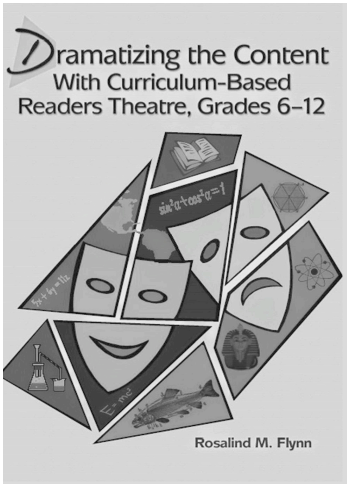
Median—half the numbers in the list are greater! [gesture]

1 – 7 Define mode!

All **Mode—the numbers that most often repeat!**
Mode—the numbers that most often repeat!

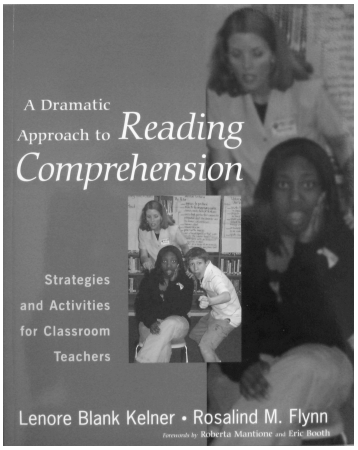
1 – 7 Our work here is done! [sound effect]

Dramatizing the Content with Curriculum-Based Readers Theatre, Grades 6-12



This book details the process of writing, revising, rehearsing, performing, and assessing original readers theatre scripts based on curriculum content. Even though the title identifies the book as being focused on grades 6-12, **the process described has been used with students as young as grade 2.**

A Dramatic Approach to Reading Comprehension: Strategies and Activities for Classroom Teachers



Rosalind and co author Lenore Blank Kelner designed this book on four drama strategies—Story Dramatization, Character Interviews, Tableau, and Human Slide Shows—for teachers with limited experience in drama. Readers will find detailed explanations of how to lead effective educational drama experiences that increase reading comprehension.

Visit Rosalind's web site for information about her books and the professional development courses, workshops, and summer institutes that she presents.

www.rosalindflynn.com

Rosalind also offers online presentations about her Curriculum-Based Readers Theatre work. Complete information can be found at this web site.

www.ArtsEducationOnline.org